Review of: "Sex bias evaluation of classic and novel Housekeeping Genes in adipose tissue through the massive analysis of transcriptomics data"

Bruno Paiva dos Santos

Potential competing interests: The author(s) declared that no potential competing interests exist.

The authors analyzed in silico data about housekeeping gene (HKG) expression from adipose tissue from humans and mice according to sex. The manuscript is interesting, well written and the authors could identify stable genes to be used as HKG in sex-unbiased human samples.

My main concern is about the proposition of using human ortholog genes in mouse samples. It is largely known that although having a highly similar identity in the genome, mice and humans evolved having completely different metabolic regulations and resistance to environmental changes that affect even the basic cell functions. The authors should strengthen the explanation of why human ortholog genes should be used in mouse samples. The experimental validation figures for humans and mice to be in the main manuscript and the authors should validate at least 2 target genes for each specie, preferentially the same target genes.

As a minor consideration, the authors should avoid subjective terms as « good », present in the last paragraph of the abstract.